

CLAIMS

1. A protector device (1) for protecting electrical equipment against voltage surges, the device comprising a protector unit (2) connected to the electrical equipment via a connection circuit (3), said circuit comprising a first connector (3A) connected to the electrical equipment, a second connector (3C) connected to the protector unit (2), and electric current interrupter means (4) movable between a return position corresponding to the circuit (3) being open-circuit, and a position corresponding to the circuit (3) being closed, said interrupter means (4) comprising a rod (4A) extending between a first end (4B) provided with catch means (4C) and a second end (4D), said rod (4A) being mounted to slide axially and resiliently between a first abutment position which is also a return position corresponding to the circuit (3) being open-circuit, and a second abutment position corresponding to the circuit (3) being closed, said catch means (4C) co-operating with blocker means (5) to hold the rod (4A) in its second abutment position, said device further comprising a bimetallic strip (6) and being characterized in that the second end (4D) of the rod (4A) is provided with a contact element (7) establishing electrical contact between the first and second connectors (3A, 3C) when the rod is in its second abutment position, the bimetallic strip (6) being firstly arranged in the device so as to be sensitive to the heat given off by the unit (2), and being secondly designed in such a manner that when the temperature of the unit (2) reaches a predetermined critical value, the strip produces a deactivation force for deactivating the blocker means (5) so as to cause the interrupter means (4) to pass into its position in which the connection circuit (3) is open-circuit.
- 35 2. A device according to claim 1, characterized in that it includes a single bimetallic strip (6).

3. A device according to claim 1 or claim 2, characterized in that the bimetallic strip (6) does not form part of the connection circuit (3).

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4. A device according to any one of claims 1 to 3, characterized in that one of ends (6A) of the bimetallic strip (6) is mounted to be stationary relative to the first and second connectors (3A, 3C), while the other end 10 (6B) is free and is provided with an abutment (5) forming the blocker means, said bimetallic strip (6) being arranged to bend when the predetermined temperature is reached, and by bending to produce the deactivation force enabling the abutment (5) to be moved away from the catch means (4C), thereby interrupting co-operation between them.

15 5. A device according to any preceding claim, characterized in that the protector unit (2) comprises at least one varistor.

20 6. A device according to any preceding claim, characterized in that the bimetallic strip (6) is mounted in the device by a cold assembly method such as clip-fastening, crimping, or riveting.

25 7. A device according to any preceding claim, characterized in that the current interrupter means (4) is resettable.

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8. A device according to any preceding claim, characterized in that it comprises a first module with the protector unit (2, 20), and a second module with the interrupter means (4, 40) and the bimetallic strip (6), 35 connector means being provided between the modules so as to enable them to be functionally associated in separable manner.